Abstract

In accordance with the invention, Brownian noise caused by molecular gas collisions in a micromachined varactor are substantially reduced, and even eliminated, by specialized packaging of the micromachined varactor. The packaging of the micromachined varactor provides for altering the environment of the micromachined varactor so that it is in a vacuum rather than in a gas. Accordingly, the random pressure fluctuations may be completely eliminated. Since a varactor is a device in which the moveable parts do not make contact with the fixed parts, and then separate, stiction is not a problem.